MONTIGO

Installation Operation & Maintenance

M40DV-PFC

M40DV-PFC (MH)

Peninsula Gas Fireplace

Warning:
Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

For Your Safety:
Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

What To Do If You Smell Gas:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

- *Check local codes and read all instructions prior to installation.*
- *Leave this manual with the owner.*

Table Of Contents

Introduction 2
Installation ..... 3 - 14
Installing the Fireplace Shell 3
Installing the Gasline 4
The Remote Switch 4
Direct Vent Installation 4
Terminations 5
Converting to Top Vent or Rear Vent model (Installing the Flue cover) 6
Rear Vent Venting Requirements 6
Rear Vent Horizontal Venting Runs 7
Rear Vent Vertical Venting Runs 8
Top Vent Venting Requirements 9
Top Vent Horizontal Venting Runs 10
Top Vent Vertical Venting Runs 11
Reduced Vertical Venting 12
Construction around the fireplace
Facing 12
Mantels and Surrounds 12
Wiring 13
Removing and Installing the Door 13
Installing the Logset 14
Installing the Ember Material 14
Operation 14-16
Model M40DV-PFC 15
Model M40DV-PFC-I 16
Maintenance 17-18
Warranty 19
Appendix
A. Termination Locations 20
B. Mobile Home Approved Models 21

Introduction

The **M40DV-PFC** is a direct-vented, 3-sided Gas Fireplace with an adjustable burner. It can be converted to both a top vent or rear vent unit, and it is available in two models:

- Model **M40DV-PFC** (continuous pilot)
- Model **M40DV-PFC-I** (intermittent pilot)
- Model **M40DV-PFC-MH** (mobile home)

For Mobile Home Approved Models See Appendix B

This manual covers both models and unless otherwise specified, the designation M40DV-PFC refers to both models. Sections which are specific to a particular model are marked with a ⬬ symbol, plus the appropriate model number.

The M40DV-PFC is rated for:

- Natural Gas at 30,000 BTU/H (8.79 Kilowatts) max. input, and 24,000 BTU/H (7.03 Kilowatts) min. input.
- Propane at 30,000 BTU/H (8.79 Kilowatts) max. input, and 24,000 BTU/H (7.03 Kilowatts) min. input.

The Montigo warranty will be voided by, and Montigo disclaims any responsibility for, the following actions:

- Modification of the fireplace and/or components including Direct-Vent assembly or glass doors.
- Use of any component part not manufactured or approved by Montigo in combination with this Montigo fireplace system.
- Installation other than as instructed in this manual.

Consult your local Gas Inspection Branch on installation requirements for factory-built gas fireplaces. Installation & repairs should be done by a qualified contractor.

Installations in Canada must conform to the current **CAN/CGA B-149.1** and **.2** Gas Installation Code and local regulations. This fireplace's fans must be electrically grounded in accordance with **CSA C22.1** Canadian Electrical Code Part 1 and/or Local Codes.

Installations in the USA must conform to local codes, or in the absense of local codes to the National Fuel Gas Code, **ANSI Z223.1-1988**. The fans must be grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, **ANSI/ NFPA 70-1987.**

CAUTIONS

Due to its high operating temperatures, the appliance should be located out of traffic & away from furniture and draperies.

- Children and adults should be alerted to the hazards of the high surface temperature, which could cause burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance.
- Clothing or other flammable materials should not be placed on or near the appliance.

P/N XG0205

Installation

Installing The Fireplace Shell

The fireplace may be installed in any location that maintains proper clearances to air conditioning ducts, electrical wiring and plumbing. Safety, as well as efficiency of operation, must be considered when selecting the fireplace location. Try to select a location that does not interfere with room traffic, has adequate ventilation, and offers an accessible pathway for Direct Vent installation.

The fireplace dimensions are shown below:

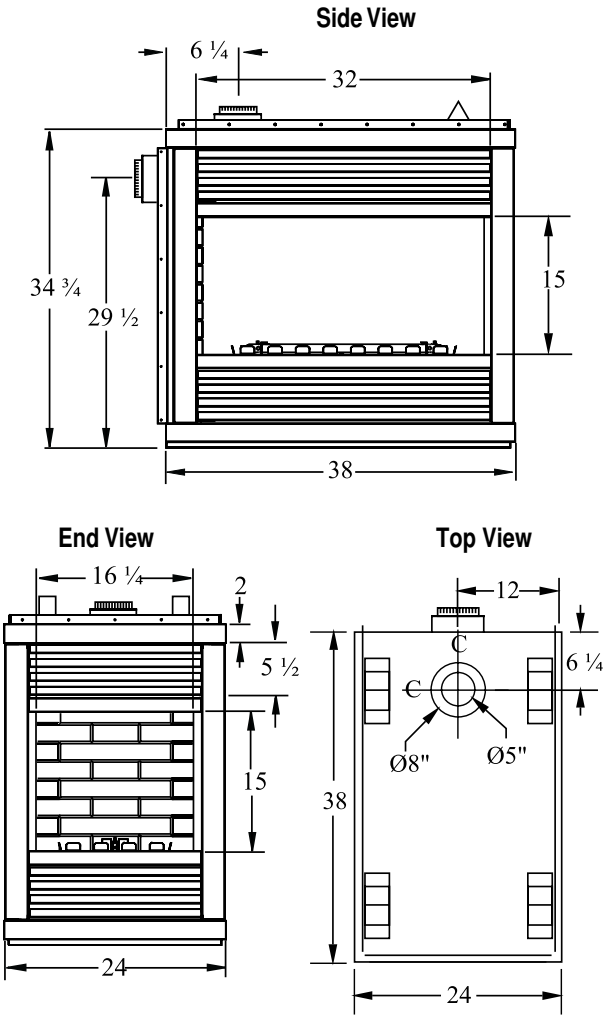


Figure 1. *Fireplace dimensions.*

WARNING:

When this appliance is installed directly on carpeting, tile or any combustible material other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the appliance.

Clearances

The **M40DV-PFC** clearances to combustible materials are:

Top*	8"
Rear	1½"
Floor	Combustible
Mantle**	6"
Flue Cover	1 1/2"

* Clearance from the top of the fireplace to a combustible ceiling within the fireplace enclosure.

** Refer to page 12.

Framing

Unprotected combustible walls which are perpendicular to the fireplace opening, must not project beyond the shaded area shown in Figure 20b.

For protection against freezing temperatures, it is recommended that outer walls of the chase be insulated with a vapour barrier. This will reduce the possibility of a cold-air convection current on the fireplace.

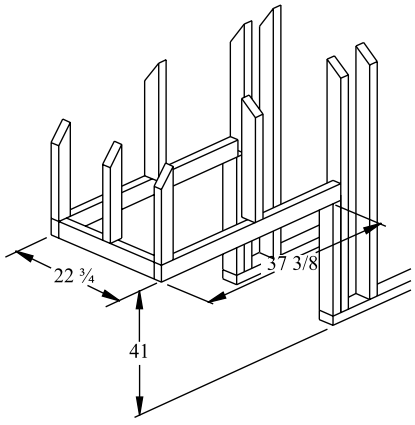


Figure 2a. *Framing dimensions.*

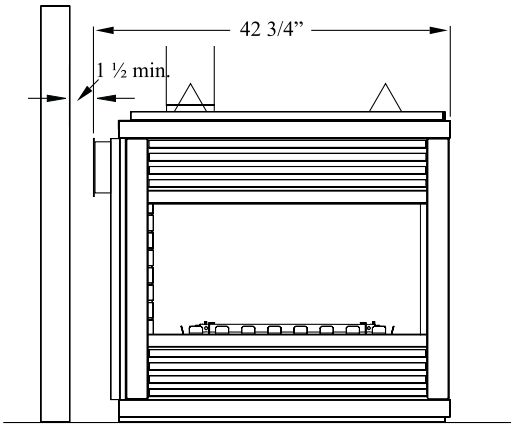


Figure 2b. *Flue Cover clearance to combustibles when installing the unit in a **top vent** configuration.*

Installation

Installing The Gas Line

The gas line must be installed before finishing the **M40DV-PFC** fireplace. **Natural Gas** requires a minimum inlet gas supply pressure of 5.5" W.C. & a manifold pressure of 3.5" W.C. **Propane Gas** requires a minimum inlet gas supply pressure of 11" W.C. & a manifold pressure of 10" W.C. Provision must also be made for a 1/8" N.P.T. plugged tapping and be accessible for test gauge connection immediately upstream of the gas supply controls to the appliance. The fireplace gas connection and the main operating gas valve are located behind the removable trim at the bottom of the unit and need only be attached to the gas line with an approved fitting, as required by the **applicable installation codes**.

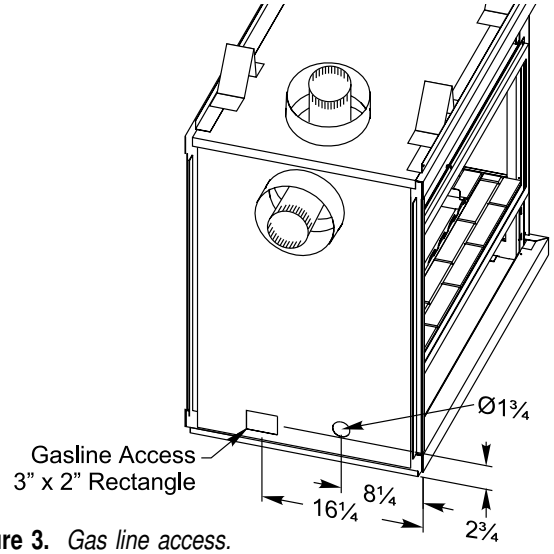


Figure 3. *Gas line access.*

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

* After gas line is connected ***each appliance connection, valve and valve train*** must be checked while under normal operating pressure with either a liquid solution, or leak detection device, to locate any source of leak. Tighten any areas where bubbling appears or leak is detected until bubbling stops completely or leak is no longer detected. **Do NOT** use a flame of any kind to test for leaks.

Installing The Remote Switch

The **M40DV-PFC** is equipped with a remote-operated valve for use with a wall switch. See Figure 20 for information on wiring the switch. The valve is pre-wired and generates its own power. **DO NOT connect any external power to it.**

Note: The switch location must not exceed 30' from the fireplace.

Vent Installation

This section covers the installation of direct venting and terminations. For a detailed diagram of allowed termination locations, see **Appendix A.**

Installation Requirements

- The M40DV-PFC fireplace uses Premium venting components with: **5" inner dia. /8" outer dia.**
- Minimum **clearance to combustible construction around the vent pipe is 1"** on all sides, except on horizontal venting where the **top** of the pipe must have a clearance of at least 2".
- Use only *certified Montigo vent components.* (Use of other parts will void the Montigo warranty, and may impede the operation of the fireplace.)
- All joints must be secured with a minimum of two screws per joint
- Vent terminations must not be recessed in walls or siding
- Horizontal runs must be supported by a minimum of two supports per horizontal run. A minimum of one screw on each side of support is also required
- Flex vent sections may be stretched up to 50% of their total length (eg. a 24" section may be stretched to 36")
- Maximum horizontal run for a flex section with no vertical rise is 3 feet.
- Flex vent sections over 3 feet must fall within the limits set by the venting graph and must have a minimum vertical rise of 3 inches per foot of flex.
- Venting components can be used in any combination of solid/rigid
- Solid vent sections may be cut less than half way from the tapered end
- Venting components can be used in any combination of solid/rigid pipe or flex pipe and in any orientation (Male connectors can face in any direction)

CAUTIONS:

- Vent terminations can be very hot. If the termination is less than 7 feet above a public walkway, it should be fitted with a certified Montigo Heat Guard. (Part no. PTKOG)
- Do not obstruct, or attempt to conceal, the vent termination. These actions will affect the operation of the fireplace, and may be hazardous.
- In heavy snow areas, take extra care to prevent snow buildup from obstructing the vent termination.

Installation

Vent Terminations

Installing Terminations with Built-In Frames

1. Frame the termination opening to 11" x 11".
2. Fasten the termination to the studs using a minimum of 4 screws.

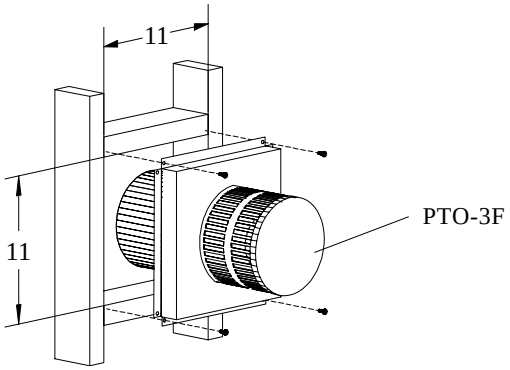


Figure 4a. *Installing a PT0-3F termination.*

Installing Terminations with MSR Frames

1. Frame the termination opening to 12" x 12".
2. Fasten the termination to the studs using a minimum of 4 screws.

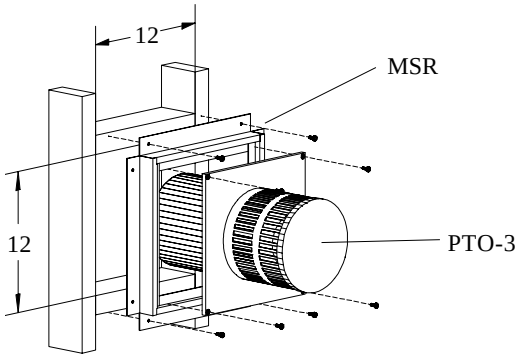


Figure 4b. *Installing a PT0-3 termination with the MSR frame.*

Installing Terminations with MOSR Frames

1. Frame the termination opening to 12" x 12".
2. Fasten the MSR frame to the interior side of the studs using a minimum of 4 screws.
3. Insert the termination into the MSR frame as shown here, and attach by screwing through the four pilot holes in the termination.

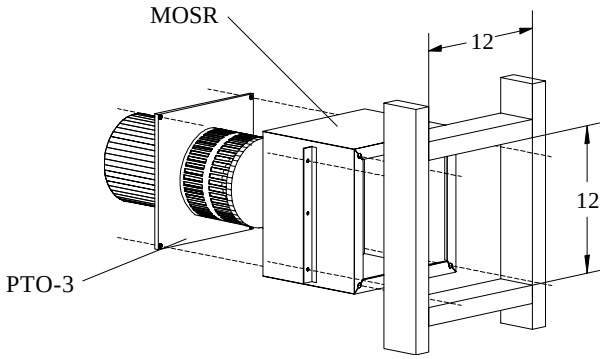


Figure 4c. *Installing a PT0-3 termination with the MOSR frame.*

Installing Heat Guards over Terminations

1. Ensure that the two ***long*** mounting brackets are facing the bottom of the termination. (See inset). This will provide more heat protection at the top of the termination, where temperatures are highest.
2. Attach to the faceplate of the termination using four sheet metal screws.

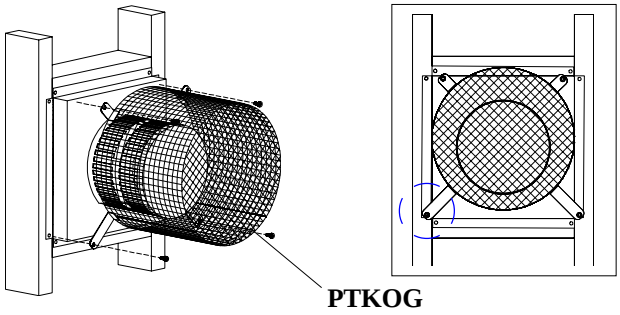


Figure 4d. *Installing the heat guard.*

Installation

Converting to Top Vent/ Rear Vent
(Installing the Flue Cover)

Rear Vent

An M40DV-PFC is shipped ready for a rear vent installation.

1. The outer flue cover must be secured in place with a minimum of 2 screws as shown below.

Top Vent

The flue cover may be converted for a top vent installation.

1. Remove the inner and outer flue covers from the top vent flue collar.
2. Install both the inner and outer flue covers on the rear vent flue collar as shown in figure 5a.
3. The outer flue cover must be secured in place with a minimum of 2 screws as shown below.

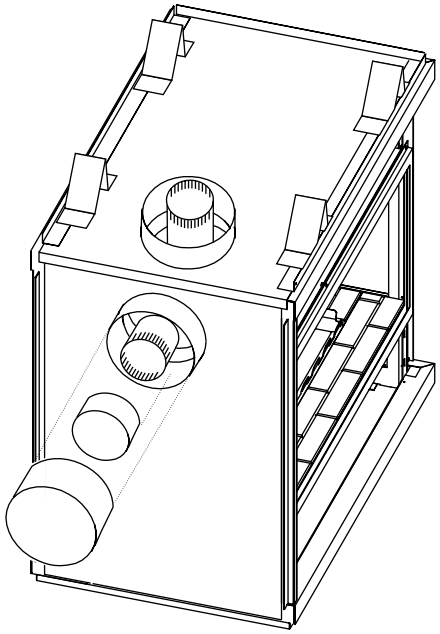


Figure 5a. *Installing the flue cover.*

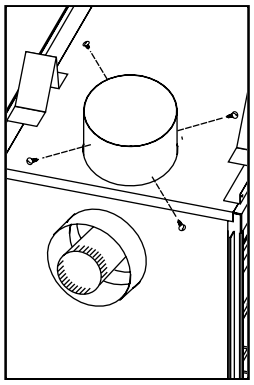


Figure 5b. *Flue cover installation for rear vented fireplace.*

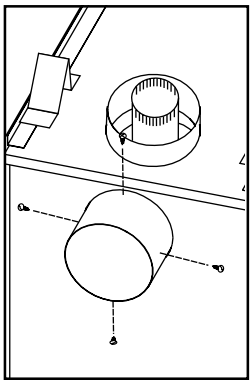


Figure 5c. *Flue cover installation for top vented fireplace.*

Rear Vent
Venting Requirements

If your installation requires more than 12" of horizontal venting, some vertical lift is required. Use the vent graph below to determine an acceptable vent run. Unacceptable venting can affect the fireplace's performance.

- the maximum horizontal vent run is 16 feet

The Rear Vent Venting Graph

Measure the vertical height from the fireplace hearth to the centre of the termination and the horizontal run from the from the fireplace flue collar to the wall flange of the termination. Plot on the Venting Graph (Fig. 6) with an 'X'.

If the 'X' falls on or above the top boundary of the shaded area, the installation is acceptable.

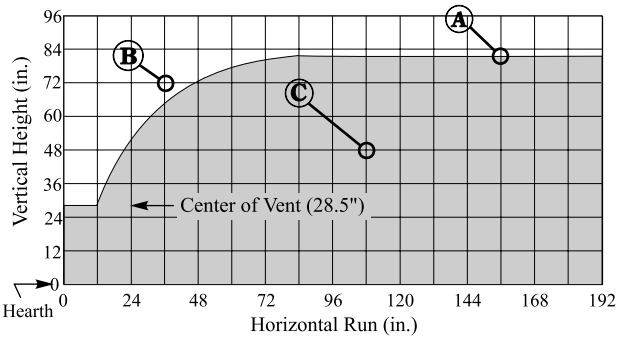


Figure 6. *Rear Vent Venting Graph.*

Example A: (Acceptable Installation)

If the vertical dimension from the hearth is 82", and the horizontal run to the wall flange of the vent termination is 156", this would be an acceptable installation.

Example B: (Acceptable Installation)

If the vertical dimension from the hearth is 72" and the horizontal run to the wall flange of the vent termination is 36", this would be an acceptable installation.

Example C: (Unacceptable Installation)

If the vertical dimension from the floor of the fireplace is 48" and the horizontal run to the wall flange of the vent termination is 108", **this would NOT be an acceptable installation.**

Horizontal Vent Installation

Rear Vent systems that terminate through a wall may comprise up to seven different components:

A - Termination	PTO-3 PTO-3F
B - Stucco Kits	MSR (stucco frame) MOSR (stucco can)
D - Flex sections	PFL-1 (12" section) PFL-2 (24" section) PFL-3 (36" section) PFL-4 (48" section)
E - Rigid sections	PEXT-1 (12" section) PEXT-2 (24" section) PEXT-3 (36" section) PEXT-4 (48" section)
F - Extensions	PXT- 5 (5" section) PXT-10 (10" section)
G - 90° elbow	PEL-90F/F PEL-90M/M
H - Heat Shield	RHS101 (for 5"/8" venting)

Short Configurations:

For installations straight through the wall, use an PTO-3/-3F termination and PXT-5 or PXT-10 to achieve the desired length. The maximum horizontal vent run with no vertical lift is 12". See Figure 7.

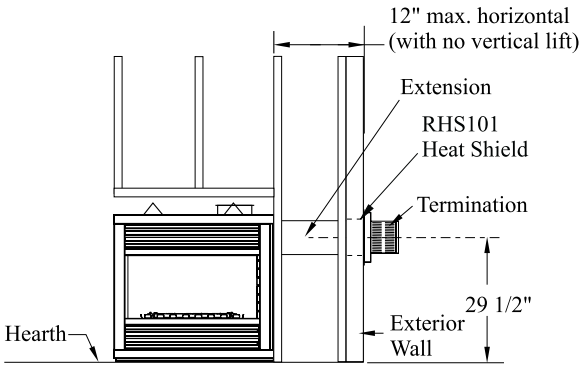


Figure 7. *Short horizontal installation.*

Heat Shields

Due to high flue temperatures, the heat shield (RHS101) must be used on **all straight through the wall installations**, at the point where the vent pipe connects to the termination. With the heat shield, the framing dimensions for the terminations can be at 11" x 11". The heat shield is not included with the fireplace.

To install the heat shield, slide one section over the vent pipe on the inside of the wall opening, with the circular portion *inside the wall cavity*. Screw the shield in place over the wall opening. Install the second section on the outside of the wall opening sliding the circular portion into the wall opening. Refer to Figure 8.

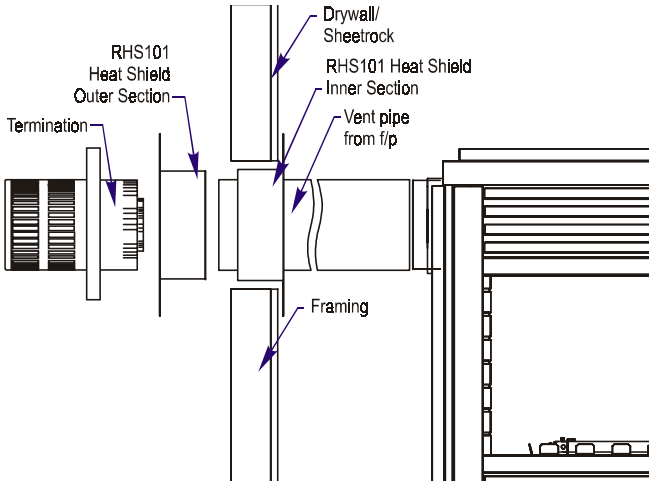


Figure 8. *Heat Shield for short horizontal installation. Install by sliding over the vent pipe where it connects to the termination.*

Long Vent Runs:

For longer or more complex vent runs, vertical lift is required. First ensure that the planned run is acceptable using the Vent Graph. Plan out the required components using the chart above. You may be able to use fewer components using the chart below.

Example:

A 10' section of rigid pipe and a 90° elbow may be used in conjunction with a 3 ft. flex section (PFL-3) will, when extended in a chase, allow for a maximum horizontal run of twelve and one-half feet from the centre of the fireplace to outside wall and a minimum of 7'6" when retracted in opposite direction. *(See Figure 9.)*

"D" flex sections and "E" solid sections may be used in conjunction with one another to obtain different possible horizontal length installations. **NOTE:** Flex section must not exceed maximum horizontal length of 4 feet, and for this application the top clearance is to the ceiling.

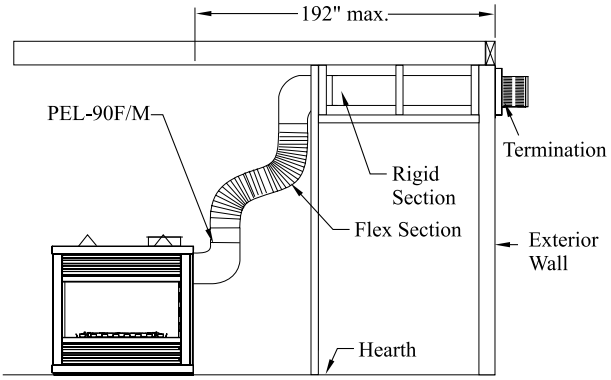


Figure 9. *Extended horizontal installation using a combination of rigid and flex venting.*

Installation Rear Vent

Vertical Vent Installations

- Vertical Installations with a rise greater than 12' can be reduced from 5/8 to 4/7 venting.
- Vertical Terminations must be installed:
  - minimum 2' (two feet) above the highest point where vent passes through the roof.
  - minimum 6' (six feet) from a mechanical air inlet
  - minimum 18" (1 1/2 feet) from a parapet wall.
- Maximum vent height is 30 feet above fireplace.
  Note: Flame characteristics will change if the maximum vent height is used.
- Minimum **clearance to combustible construction around the vent pipe is 1"** on all sides must be maintaned, except on horizontal venting where the **top** of the pipe must have a clearance of at least 2".

1. Straight Vertical Installation

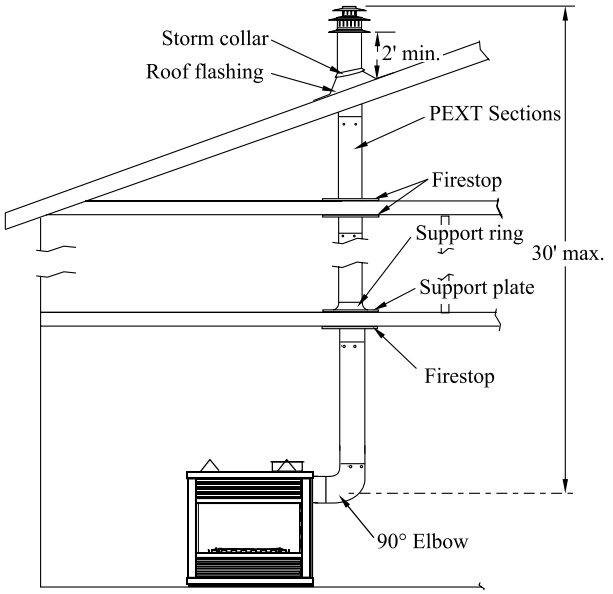


Figure 10. *Straight, vertical venting. When the vent run is not reduced use a PEL-90F/F elbow, which is connected directly to the fireplace flue collar. In this case, the PXT-10 adaptor is not needed. * If reducing to 4"/7" venting see figure 19.*

2. Offset Vertical Installations

- A maximum of two offsets **(each offset has two 90° bends)** may be made if the length of the offsets does not exceed 25% of the vertical vent height, when measured center to center of piping.

  Example: Typical vent installation.
  30' vertical vent
  2 - 2' offsets required
  25% of 30' = 7-1/2' max. offset allowed
  This venting configuration meets requirements.

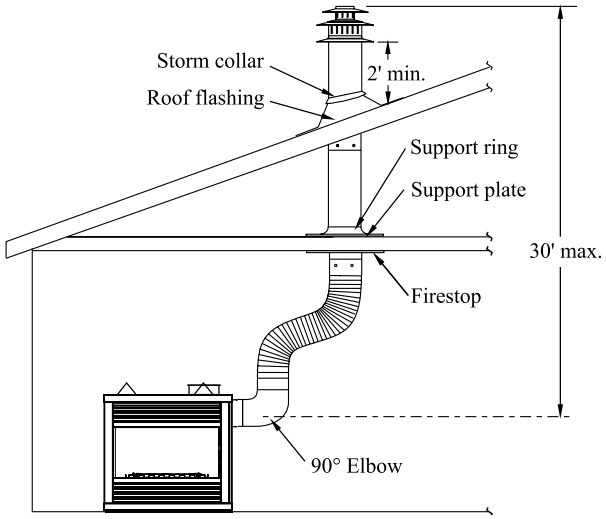


Figure 11a. *Vertical venting with 1 offset (1 offset= two* 90° bends).
** If reducing to 4"/7" venting see figure 19.*

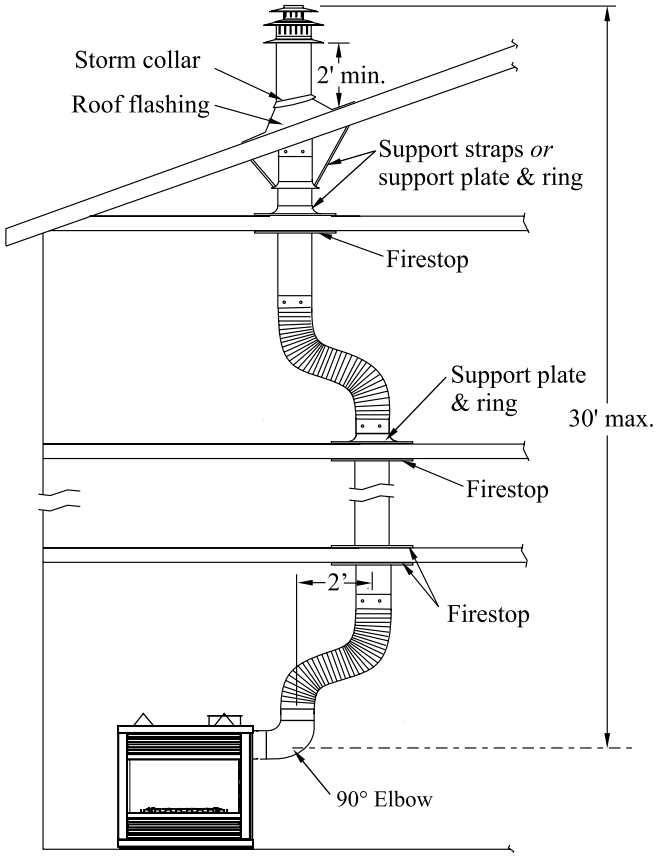


Figure 11b. *Vertical venting with 2 offsets (1 offset= two* 90° bends).
** If reducing to 4"/7" venting see figure 19.*

P/N XG0205

Installation *Top Vent*

Top Vent Venting Requirements

Before you install any venting, you must determine whether the venting run will be acceptable. Unacceptable venting can affect the fireplace's combustion.

- for installations with horizontal venting runs of 0-16 feet, use the vent graph, as described below
- the maximum horizontal vent run is 16 feet.

The Rear Vent Venting Graph

Measure the vertical height from the fireplace hearth to the centre of the termination and the horizontal run from the from the fireplace flue collar to the wall flange of the termination. Plot on the Venting Graph (Fig. 12) with an 'X'.

If the 'X' falls on or above the top boundary of the shaded area, the installation is acceptable.

Example A: (Acceptable Installation)

If the vertical dimension from the hearth is 72", and the horizontal run to the wall flange of the vent termination is 120", this would be an acceptable installation.

Example B: (Acceptable Installation)

If the vertical dimension from the hearth is 66" and the horizontal run to the wall flange of the vent termination is 30", this would be an acceptable installation.

Example C: (Unacceptable Installation)

If the vertical dimension from the floor of the fireplace is 48" and the horizontal run to the wall flange of the vent termination is 84", **this would NOT be an acceptable installation.**

Installation Of Top Vent DV

A complete **M40DV-PFC** vent system may comprise up to five different types of components:

A - Termination	PTO-3 (3" length) PTO-3F (3" length)
B - Stucco Kits	MSR (stucco frame) MOSR (stucco can)
C - Flex sections	PFL-1 (12" section) PFL-2 (24" section) PFL-3 (36" section) PFL-4 (48" section)
D - Solid sections	PEXT-1 (12" section) PEXT-2 (24" section) PEXT-3 (36" section) PEXT-4 (48" section)
E - Elbows	PEL-90MM (m/m 90° elbow) PEL-90FF (f/f 90° elbow) PEL-90FM (f/m 90° elbow)

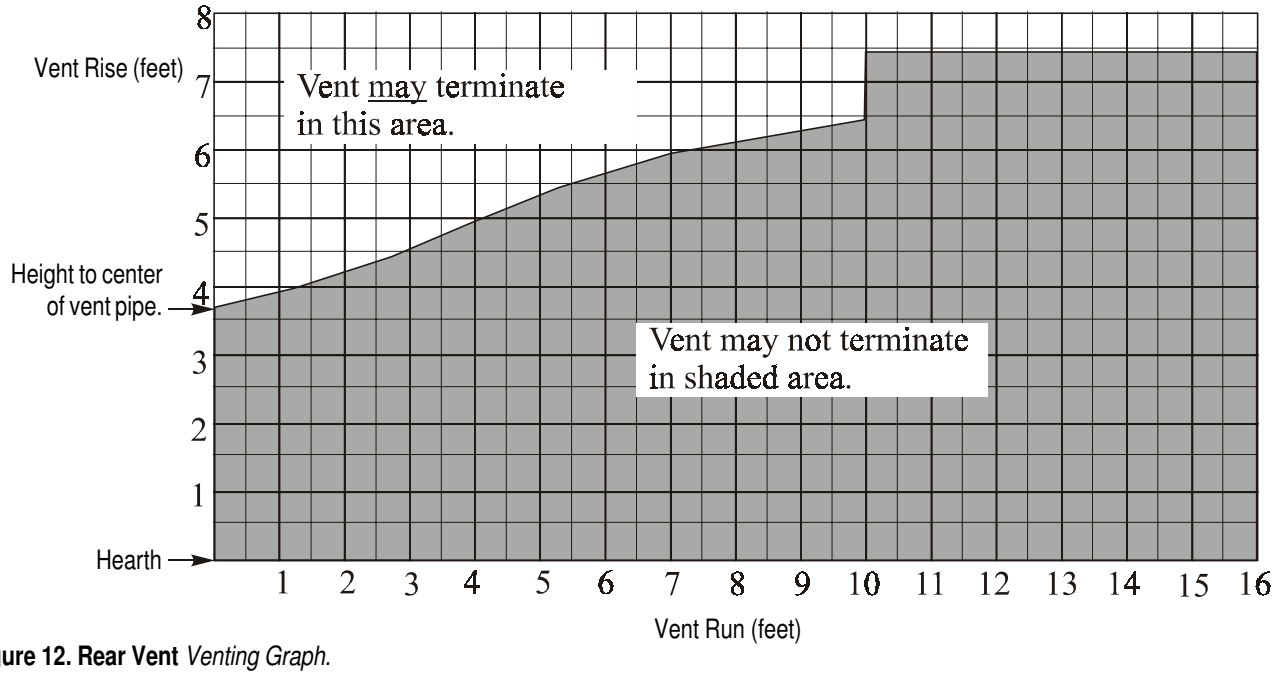


Figure 12. Rear Vent *Venting Graph.*

Installation Top Vent

Example:

A 10' section and an elbow used in conjunction with 3 ft. flex section (PFL-3) will, when extended in a five foot chase, allow for a maximum horizontal run of twelve and one-half feet from the centre of the fireplace to outside wall and a minimum of 7'6" when retracted in opposite direction. *(See Figure 14a and 14b.)*

"D" flex sections and "E" solid sections may be used in conjunction with one another to obtain different possible horizontal length installations. **NOTE:** Flex section must not exceed maximum horizontal length of 3 feet. *(See Figure 15.)*

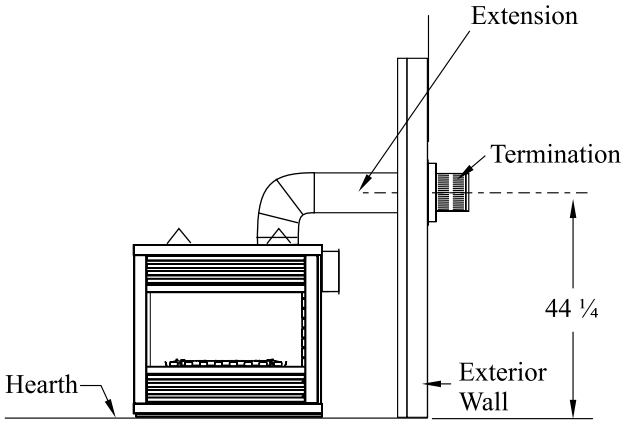


Figure 13. *Short Horizontal Installation.*

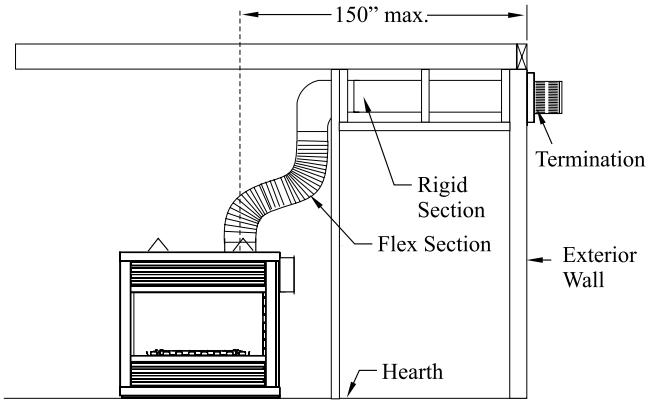


Figure 14a. *Extended installation.*

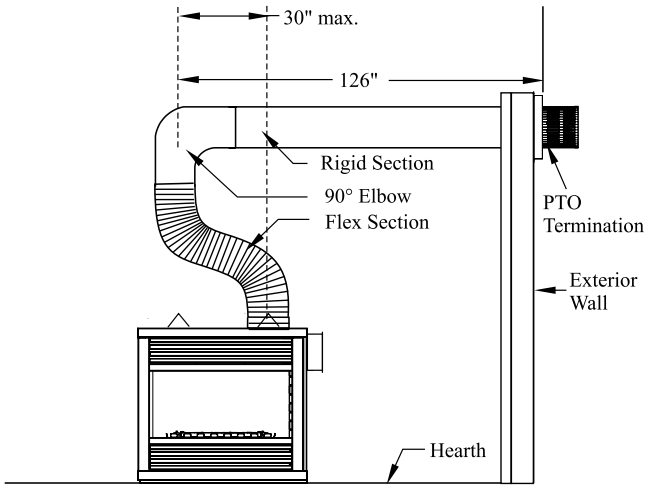


Figure 14b. *Retracted Installation.*

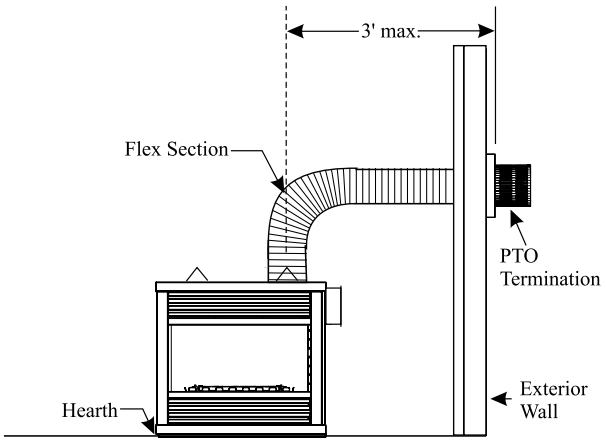


Figure 15. *Horizontal flex installation.*

Installation Top Vent

Installation Of Vertical Vent DV

- Vertical Terminations must be installed:
  - minimum 2' (two feet) above the highest point where vent passes through the roof.
  - minimum 6' (six feet) from a mechanical air inlet
  - minimum 18" (1 1/2 feet) from a parapet wall.
- Maximum vent height is 30 feet above fireplace.
  Note: Flame characteristics will change if the maximum vent height is used.
- Minimum **clearance to combustible construction around the vent pipe is 1"** on all sides must be maintaned, except on horizontal venting where the **top** of the pipe must have a clearance of at least 2".

A - Termination	PVTK-1
B - Flex sections	PFL-1 (12" section) PFL-2 (24" section) PFL-3 (36" section) PFL-4 (48" section)
C - Solid sections	PEXT-1 (12" section) PEXT-2 (24" section) PEXT-3 (36" section) PEXT-4 (48" section)
D - Support Ring & Plate	PSPXT-7 (8" dia.)
E - Firestop	PS-8 (8" dia.)
F - Roof Flashing	PRF-7 (1/12 - 7/12 pitch) PRF-12 (7/12 - 12/12 pt.)

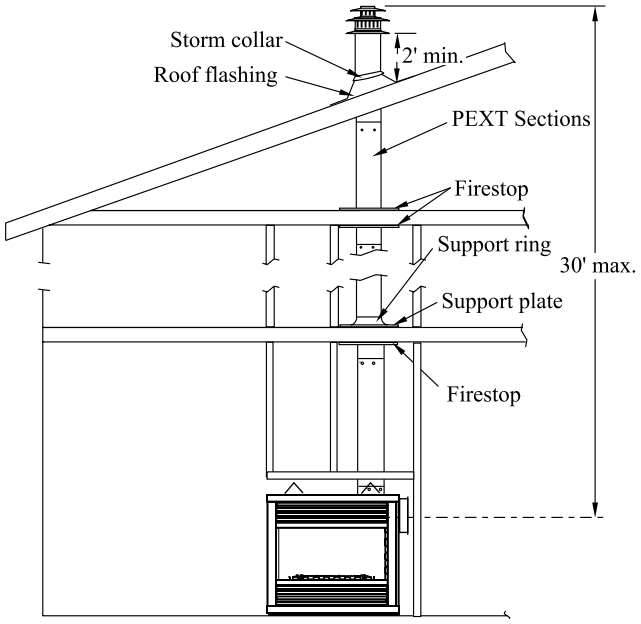


Figure 16. *Straight, vertical venting.*
** If reducing to 4"/7" venting see figure 19.*

- A maximum of two offsets **(each offset has two 90° bends)** may be made if the length of the offsets does not exceed 25% of the vertical vent height, when measured center to center of piping.

Example: Typical vent installation.
30' vertical vent
2 - 2' offsets required
25% of 30' = 7-1/2' max. offset allowed
This venting configuration meets requirements.

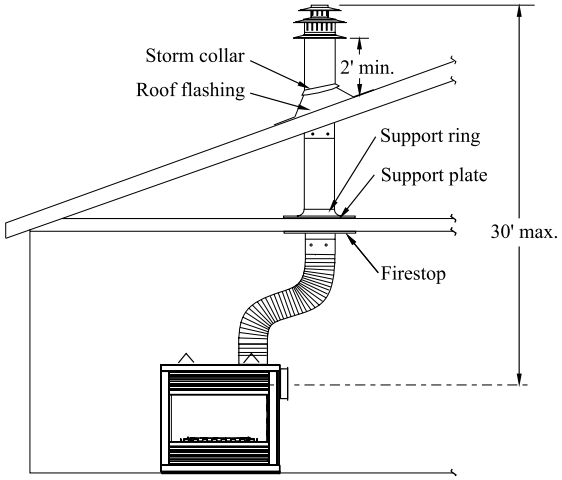


Figure 17. *Vertical venting using 1 offset (1 offset= two* 90° bends).
** If reducing to 4"/7" venting see figure 19.*

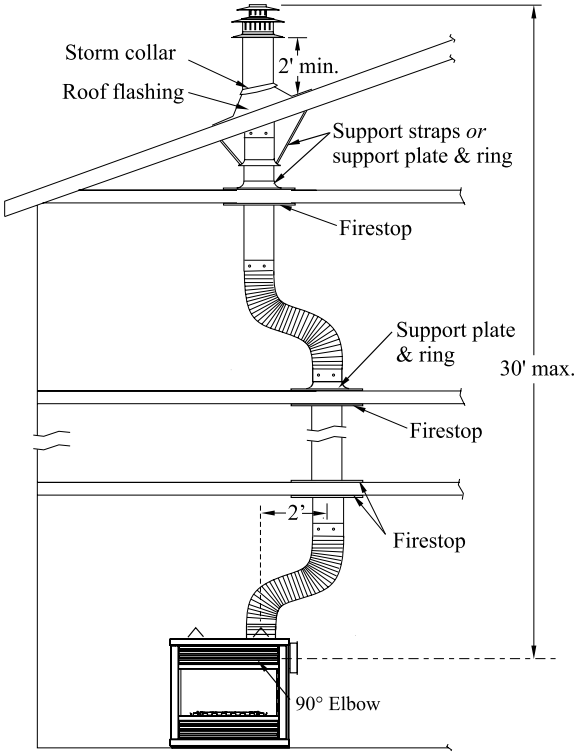


Figure 18. *Vertical venting using 2 offsets (1 offset= two* 90° bends).
** If reducing to 4"/7" venting see figure 19.*

Installation

Reduced Vertical Installation

It is possible to reduce vertical vent runs from 5"/8" venting to 4"/7" venting. Reduced vertical venting may only be used when the installation exceeds 12 feet and terminates through the roof, and if the vertical vent reducer is used with the following venting configuration.

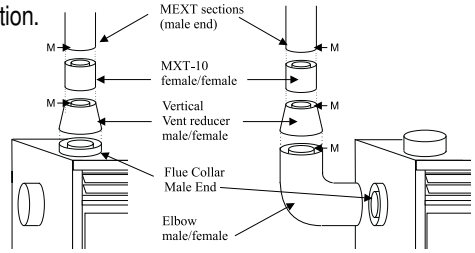


Figure 19. *Reduced Vertical venting application from 5"/8" to 4"/7".*

Part	Size	5"/8" Venting	4"/7" Venting
A - Termination	n/a	PVTK-1	MVTK-1
B - Flex sections	12" length	PFL-1	MFL-1
	24" length	PFL-2	MFL-2
	36" length	PFL-3	MFL-3
	48" length	PFL-4	MFL-4
C - Solid sections	12" length	PEXT-1	MEXT-1
	24" length	PEXT-2	MEXT-2
	36" length	PEXT-3	MEXT-3
	48" length	PEXT-4	MEXT-4
D - Support Ring & Plate		PSPXT-8	MSPXT-7
E - Firestop		PS-8	FS-7
F - Roof Flashing	(1/12-7/12 pt.)	PRF-7	MRF-7
	(7/12-12/12 pt.)	PRF-12	MRF-12
G - Vertical Vent Reducer	(5"/8" to 4"/7")	PVA5487	

Finishing Around the Fireplace

Combustible mantels and mouldings may be safely installed over the top and on the front of the fireplace provided that they do not project beyond shaded area shown in **Figure 20a**. Side wall clearances are 0". Combustible surrounds may be installed with 0" clearance to the side of the fireplace as shown in **Figure 20b**.

Fireplace Facing

When selecting the finish material for your fireplace, it is important to remember the following: **LOUVRE TRIMS AND FIREPLACE FRAME MUST NOT BE OBSTRUCTED IN ANY WAY - to do so restricts the air supply for the control compartments and heat exchanger it also prevents access for servicing controls.**

The face of the fireplace may be painted to match the room decor, provided you use a heat-resistant paint. Decorative facing must not extend past the fireplace opening at all, because it will interfere with the access to retainers for removal of glass door. ***When using a tile facing, It is required not to tile over the outside frame of the fireplace, as this will obstruct the door removal.*** See Figure 20c.

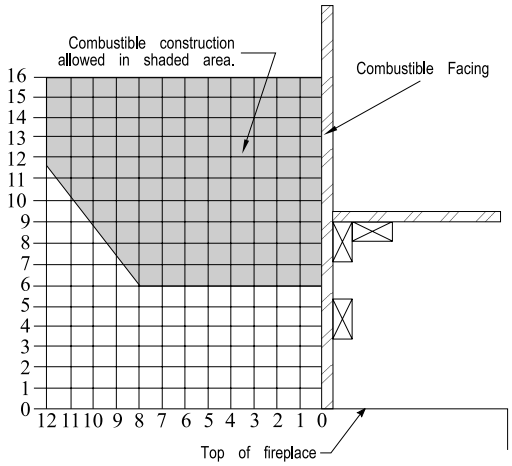


Figure 20a. *Combustible mantles and facings.*

Mantels & Surrounds

NOTE: Mantel clearances are for fire hazard prevention to combustible materials.

New technology, to meet consumer and government demands for the wise use of energy, has prompted us to manufacture many models of fireplaces which are hot, fuel and energy efficient.

Please be aware; temperatures over the mantel will rise above normal room temperature and walls above fireplace may be hot to touch.

We recommend careful consideration be given to the effects of elevated mantel temperatures which may be in excess of product design, for example: candles, plastic or pictures. This can cause melting, deformation, discoloration or premature failure of T.V. and radio components.

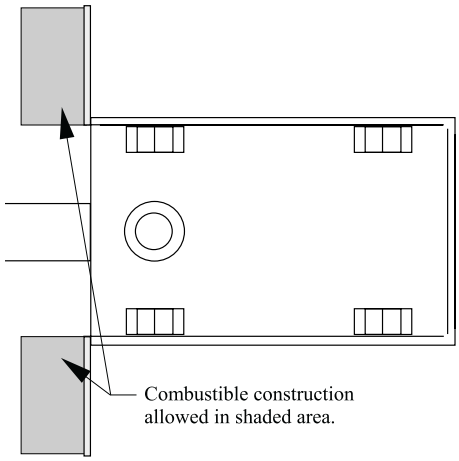


Figure 20b. *Combustible surrounds. Top view of fireplace.*

Painting:

Special care is recommended by the Master Painters and Decorators Association, when painting the fireplace surrounds, to select and apply a quality ***Alkyd sealer*** prior to the applying of latex paints. This is to prevent leaching of water from evaporation and causing a brownish staining effect to paint over coats.

Installation

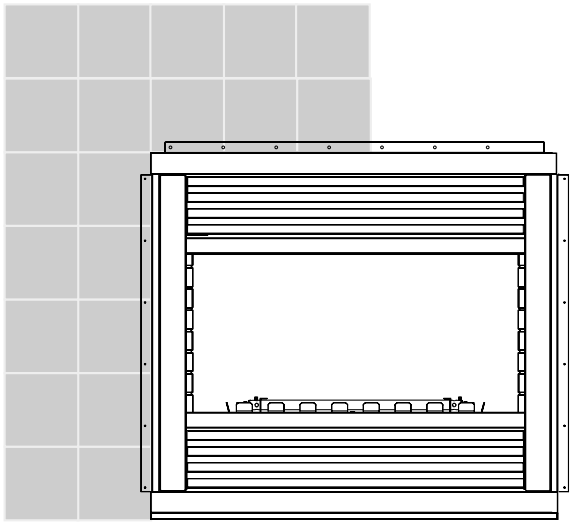


Figure 20c. *When using a tile surround, do not tile over the outside frame.*

Wiring

Gas Control and Pilot Wiring

M40DV-PFC-I

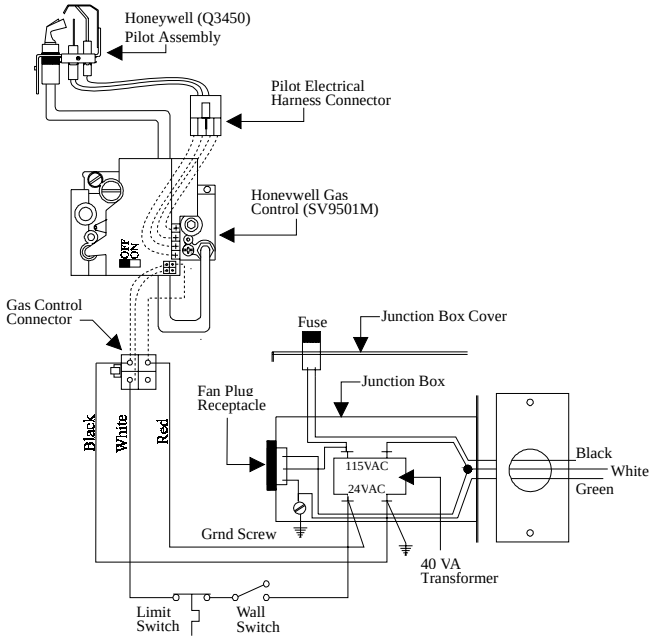


Figure 21. *Wiring for the M38DV-PFC-I with Honeywell gas control and pilot.*

Removing and Installing the Glass Doors

Removing the Louvres and Side Panels

Rotate the upper end louvre assembly approximately 110° (as shown in figure 22a, step ❶). Pull the assembly towards you to remove it from the fireplace.

Repeat this for the lower end louvre assembly.

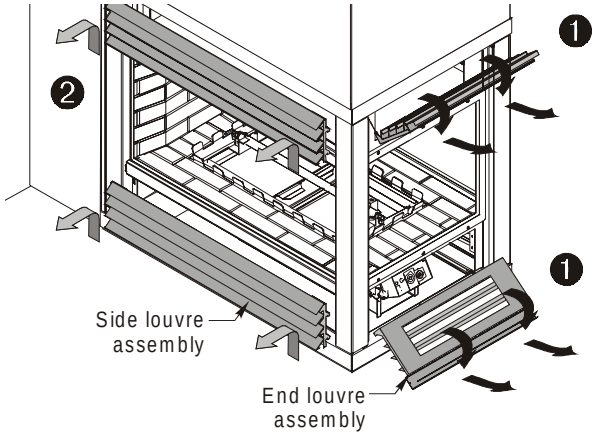


Figure 22a. *Removing the louvre assemblies.*

Remove the louvre assemblies (upper and lower) from one side of the fireplace. Grasp the assembly underneath one of the louvres and up slightly and pull outwards, as shown in figure 22a.

Remove the side panel by sliding it out and away from the back of the fireplace. Refer to figure 22b.

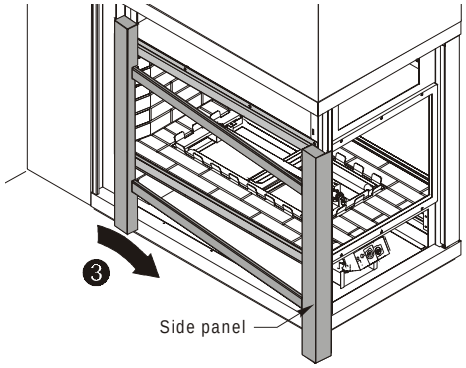


Figure 22b. *Removing the side panel.*

Removing the Doors

To remove the inner doors, simply unscrew the eight (8) machine screws on the top and bottom of the door. *(See figure 22c).*

Door Installation

To re-install the doors, align the door with the screw holes and re-fasten with all eight machine screws. Ensure that a good seal is maintained.

Re-install the side panels and louvre assemblies by reversing the above steps.

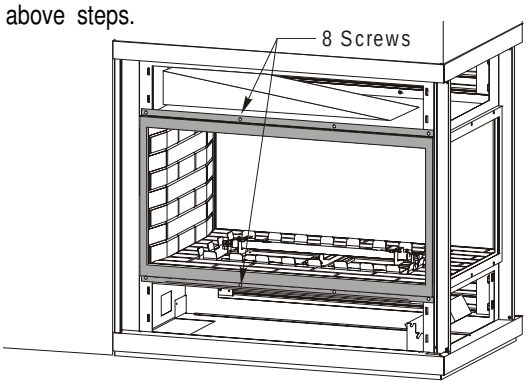


Figure 22c. *Removing the door.*

Installation

Installing the Logs and Embers

Bottom Logs

The **M40DV-PFC** is supplied with five (5) fibre logs. The two large bottom logs (logs *"A"* and *"B")* are mounted on the burner grate by placing them into the slots.

Top Logs

Place logs *"C"* and *"D"* into their mating positions on the large logs as shown in Figure 23a below**.** Log *"E"* is mounted on top of logs *"C"* and *"D"* as shown in Figure 23b.

WARNING: If logs are not placed properly, excessive sooting will result.

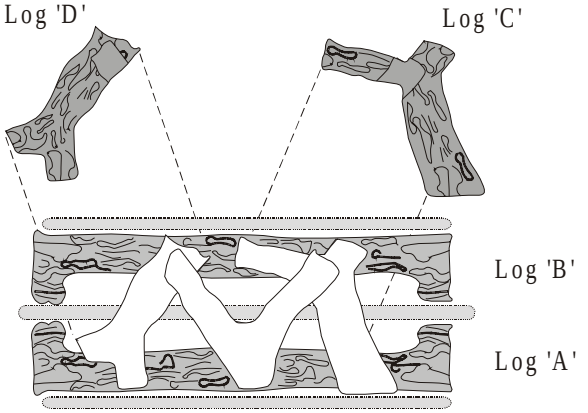


Figure 23a. *Log Installation.*

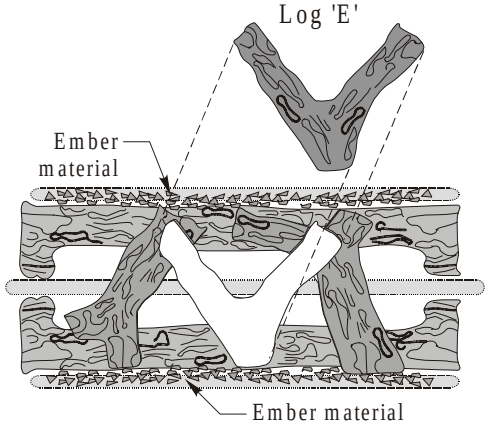


Figure 23b. *Completed Installation.*

Installing the Ember Material

The ember material is supplied in two packages. Place the material evenly along both ember burner tubes, next to logs 'A' and 'B'. Refer to figure 23b. Ensure that the burner carries over properly after placing the embers.

Operation

Lighting Instructions

See Pages 15-16.

Burner Adjustment

The M40DV-PFC is equipped with an adjustable burner, allowing you to raise or lower the flames. To adjust the flames, locate the black knob marked 'Hi-Lo', in the centre of the gas control valve (See Figure 24). The front burners are not adjustable.

- To raise the flame height, turn the black knob (located behind the lower trim) **counterclockwise**.
- To lower the flame height, turn **clockwise**.

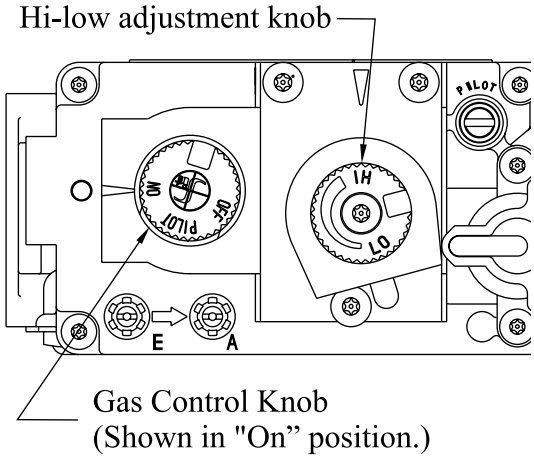


Figure 24. *'Hi-Lo' Adjustment on the M40DV-PFC's gas valve.*

Note: *M40DV-PFC-I (electronic ignition) or M40DV-PFC-MH (mobile home) models do not feature hi/lo adjustment. For electronic ignition (HSI) models see figure 21, for mobile home approved models see Appendix B.*

M40DV-PFC Operation - Model M40DV-PFC

with Continuous Pilot

For Your Safety - READ BEFORE LIGHTING:

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

What To Do If You Smell Gas:

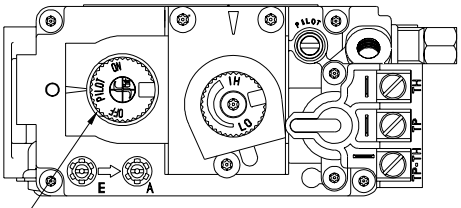
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the Fire Department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempt to repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system, and any gas control which has been under water.

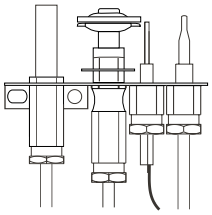
Lighting Instructions:

1. **STOP!** Read the safety information above on this label.
2. Flip down the lower louvres on the end panel of the fireplace.
3. Push in gas control knob and turn clockwise ↷ to "OFF."
4. Wait five (5) minutes to clear out any gas. Smell for gas, including near the floor. If you then smell gas, **STOP!** Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
5. Locate pilot burner *(See illustration at right.)* and follow steps below.
6. Turn knob on gas control counterclockwise ↶ to "PILOT."
7. Push in gas control knob completely and hold. Light with Piezo Igniter button. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release the knob and it will pop back up. Pilot should remain lit. If it goes out repeat steps 3 through 8.
   - If knob does not pop up when released. Stop and immediately call your service technician or gas supplier.
   - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
8. Push in gas control knob and turn counterclockwise ↶ to "ON."
9. Flip up the lower louvres.
10. Turn on remote switch to ignite fire.



Gas Control Knob
(Shown in "Pilot" postion.)

NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.



To Turn Off Gas To Appliance:

1. Turn off remote switch.
2. Flip down the lower end louvres.
3. Push in gas control knob slightly and turn clockwise to "Off". Do not force.
4. Flip up the lower end louvres.

M40DV-PFC-I Operation - Model M40DV-PFC-I

with Honeywell Intermittent Pilot

For Your Safety - READ BEFORE LIGHTING:

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance is equipped with an ignition system that lights the pilot burner automatically. **Do not attempt to light the pilot by hand.**

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

What To Do If You Smell Gas:

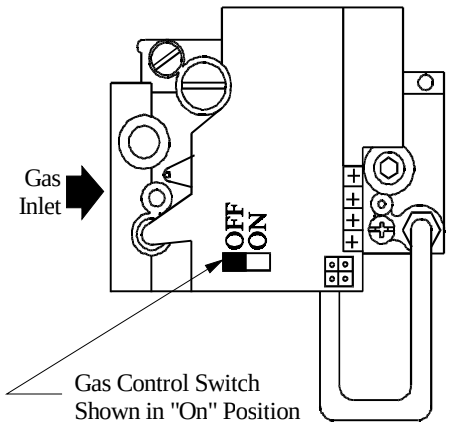
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the Fire Department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempt to repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system, and any gas control which has been under water.

Lighting Instructions:

1. **STOP!** Read the safety information above on this label.
2. Flip down the lower louvres on the end panel of the fireplace.
3. Turn switch on the gas control to OFF".
4. Wait 5 minutes to clear out any gas. If you smell gas, **STOP!** Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
5. Turn switch on the gas control to "ON". **NOTE:** This unit is equipped with an ignition system that lights the pilot burner automatically. **Do not attempt to light the pilot by hand.**
6. Turn on wall switch.
7. Flip up the lower end louvres..
8. If the fireplace does not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



To Turn Off Gas To Appliance:

1. Turn off remote switch.
2. Flip down the lower end louvres.
3. Turn the switch on the gas control to "Off".
4. Flip up the lower end louvres.

P/N XG0205

Maintenance

CAUTION

- Fireplace gas control must be in the "OFF" position and pilot and main burners extinguished when cleaning appliance with a vacuum.
- Glass and logs can get very hot. Handle only when cool.

General

- Have the fireplace installation inspected yearly, including a visual check of the vent system, the burner and the pilot flame. For convenience a 1/8" manifold pressure tap is supplied on the gas valve for a test gauge connection. See Figure 25.
- For **Natural Gas** this appliance requires a minimum inlet pressure of 5.5" W.C. and a manifold pressure of 3.5" W.C.
- For **Propane Gas** this appliance requires a minimum inlet pressure of 11" W.C. and a manifold pressure of 10" W.C.
- Always keep the fireplace area clear and free of combustible materials, as well as gasoline and other flammable vapours and liquids.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

Cleaning

When the fireplace is first activated, there may be some smoking and a visible film may be left on the glass. This is a normal condition, and is the result of burning the protective coatings on new metal.

- Glass must be cleaned periodically to remove any film (a normal bi-product of combustion) which may be visible. Film can easily be removed by removing the door, as shown on page 13. Handle the door carefully, and clean it with an approved glass cleaner. One of the most effective products is Kel Kem.
- Silicone seals on inner door during initial firing will "off gas", leaving a visual deposit of a white substance on combustion chamber walls. This can easily be removed by following the steps described below.
- Use a vacuum cleaner or soft bristle brush to keep the control compartment, burner, and firebox free from dust and lint.
- Logs may be cleaned periodically with a vacuum to remove soot.

WARNING:

Do not attempt to clean glass when hot.

Do not clean glass with abrasive materials as any glass etching may cause premature glass failure.

Gas Control Valve

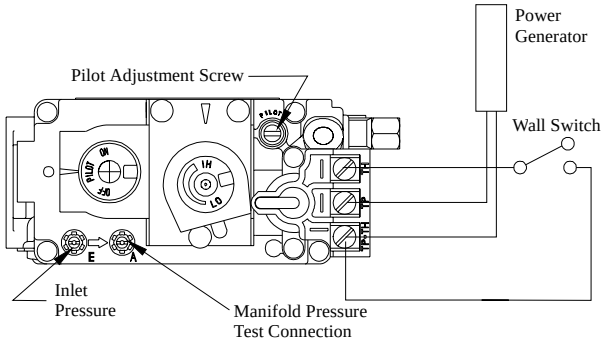


Figure 25. ***Sit Nova 820*** *gas valve.*

Pilot Burner Adjustment

1. Locate Pilot Adjustment Screw. *(See figure 25.)*
2. Adjust pilot key to provide properly sized flame. *(See figure 26).*
3. After installing or servicing, leak test with a soap solution with main burner on. Coat pipe and tubing joints, gasket etc. with soap solution. Bubbles indicate leaks. Tighten any areas where the bubbles appear until the bubbling stops completely.

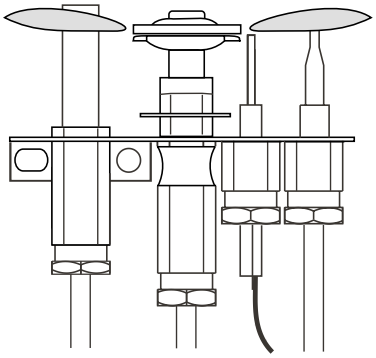


Figure 26. *Pilot Burner*

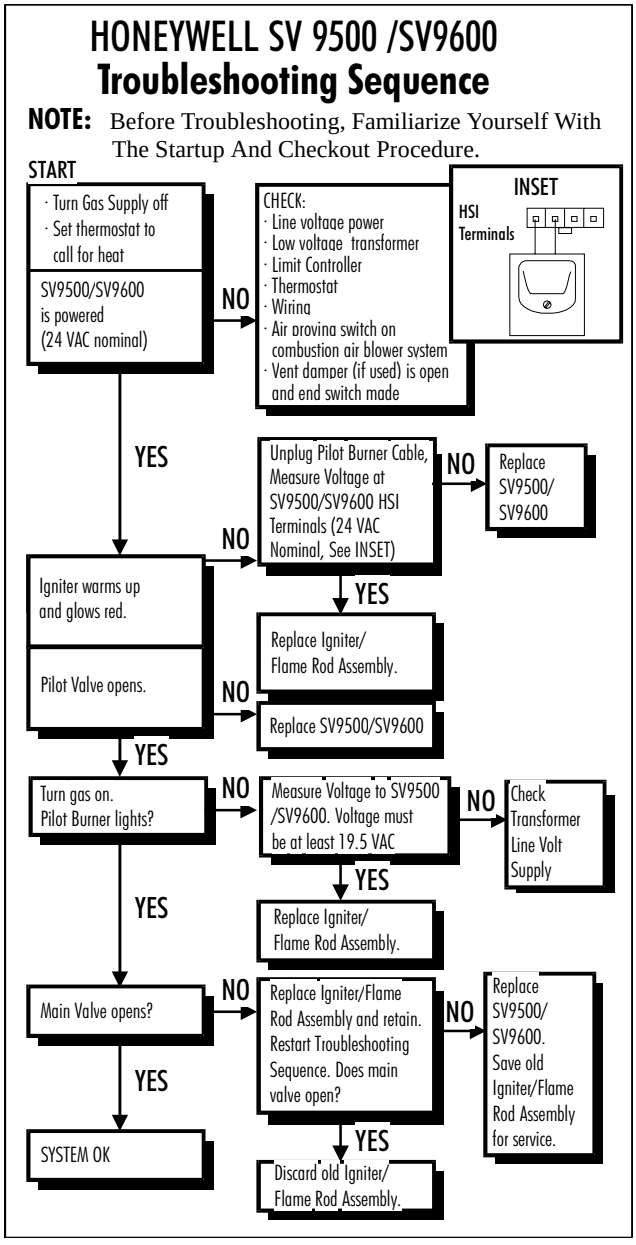
Maintenance

Troubleshooting M40DV-PFC

The following is a troubleshooting chart of possible problems:

PROBLEM	CORRECTIVE ACTION
Noisy Pilot Flame	Locate pilot adjustment screw on the front of the gas control valve. Flame is decreased by turning adjustment screw clockwise.
Pilot won't ignite	Disconnect remote wires and try to light pilot. If pilot now works, remote connections are faulty. Check wiring diagram **figure 25.**
Main burner will not light	1. Check wiring **(see figure 25)** 2. Check wall switch for proper connection. 3. Check pilot burner. If extinguished: a. Allow fireplace to cool, then try to relight. b. If condition persists, call a qualified service person.

Troubleshooting M40DV-PFC-I


HONEYWELL SV 9500 /SV9600
Troubleshooting Sequence
NOTE: Before Troubleshooting, Familiarize Yourself With The Startup And Checkout Procedure.
START
· Turn Gas Supply off
· Set thermostat to call for heat
SV9500/SV9600 is powered (24 VAC nominal)
NO
CHECK:
· Line voltage power
· Low voltage transformer
· Limit Controller
· Thermostat
· Wiring
· Air proving switch on combustion air blower system
· Vent damper (if used) is open and end switch made
INSET
HSI Terminals
YES
Unplug Pilot Burner Cable, Measure Voltage at SV9500/SV9600 HSI Terminals (24 VAC Nominal, See INSET)
NO
Replace SV9500/ SV9600
YES
Igniter warms up and glows red.
NO
Replace Igniter/ Flame Rod Assembly.
Pilot Valve opens.
NO
Replace SV9500/SV9600
YES
Turn gas on. Pilot Burner lights?
NO
Measure Voltage to SV9500 /SV9600. Voltage must be at least 19.5 VAC
NO
Check Transformer Line Volt Supply
YES
Replace Igniter/ Flame Rod Assembly.
YES
Main Valve opens?
NO
Replace Igniter/Flame Rod Assembly and retain. Restart Troubleshooting Sequence. Does main valve open?
NO
Replace SV9500/ SV9600. Save old Igniter/Flame Rod Assembly for service.
YES
SYSTEM OK
YES
Discard old Igniter/ Flame Rod Assembly.

If your fireplace still does not operate correctly, consult your dealer or the manufacturer.

All service and repairs should be performed by a qualified agency.

All spare parts, optional fans (see optional fan instruction guide), and optional trim finishes are available from Canadian Heating Products Inc. or your local dealer.

Warranty

The Warranty

The Companies warrants the Montigo Gas Appliance to be free from defects in materials and workmanship at the time of manufacture. On the Montigo, there is a ten-year warranty on the firebox and its components, a five-year warranty on the main burner and pilot burner, and a one-year warranty on the gas control valve and fibre logs. Glass, plated/painted finishes, and refractory lining are exempt.

Remedy And Exclusions

The coverage of this Warranty is limited to all components of the Gas Appliance manufactured by The Companies.

This Warranty only covers Montigo Gas Appliances installed in the United States or Canada.

If the components of the Gas Appliance covered by this Warranty are found to be defective within the time frame stated (see The Companies right of investigation outlined below). The Companies will, at its option, replace or repair defective components of the Gas Appliance manufactured by The Companies at no charge, and will also pay for reasonable labour costs incurred in replacing or repairing components. If repair or replacement is not commercially practical, The Companies will, at its option, refund the purchase price of the Montigo Gas Appliance.

This Warranty covers only parts and labour as provided above. In no case shall The Companies be responsible for materials, components, or construction which are not manufactured or supplied by The Companies, or for the labour necessary to install, repair or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. the nearest The Companies factory.

Qualifications To The Warranty

The Gas Appliance Warranty outlined above is further subject to the following qualifications:

(1) The Gas Appliance must be installed in accordance with The Companies installation instructions and local building codes. The Warranty on this Montigo Gas Appliance covers only the component parts manufactured by The Companies. The use of components manufactured by others with this Montigo Gas Appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by The Companies

(2) The Montigo Gas Appliance must be subjected to normal use. The Gas Appliances are designed to burn gas only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the Gas Appliance, will produce excessive temperatures and will result in a fire hazard.

Limitations On Liability

It is expressly agreed and understood that The Companies sole obligation, and purchaser's exclusive remedy under this Warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above.

In no event shall The Companies be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by The Companies negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this Montigo Gas Appliance is limited to the duration of the foregoing warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above may not apply to you.

Investigation Of Claims Against Warranty

The Companies reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

The Companies Are Not Responsible For Work Done Without Written Consent

The Companies shall in no event be responsible for any warranty work done without first obtaining The Companies written consent.

Dealers Have No Authority To Alter This Warranty

The Companies employees and dealers have no authority to make any warranties nor to authorize any remedies in addition to or inconsistent with those stated above.

How To Register A Claim Against Warranty

In order for any claim under this Warranty to be valid, The Companies must be notified of the claimed defect in writing or by telephone, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, and a description of the defect.

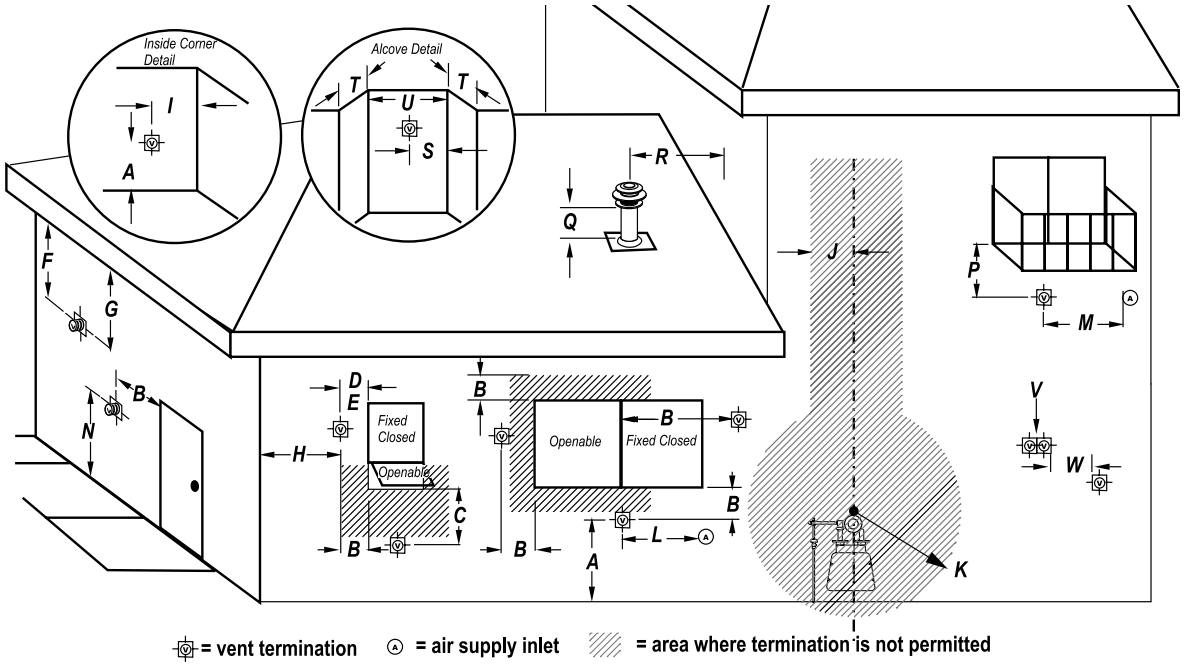
Other Rights

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

NOTE: *The Companies* as stated above refer to - Canadian Heating Products Inc. and/or Montigo Del Ray Corp.

Canadian Heating Products Inc. and/or Montigo DelRay Corp. reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products.

Appendix A - Termination Locations



= vent termination Ⓐ = air supply inlet = area where termination is not permitted

A = clearance to the termination frame above grade, veranda, porch, deck, or balcony [16 inches (41 cm) minimum]

B = clearance to door, or sides and top of window, that may be opened [16 inches (41 cm) minimum for appliances ≤100 000 BTU/H (30kW)]

C = clearance to bottom of window that may be opened horizontally [36 inches (92 cm) minimum for appliances ≤100 000 BTU/H (30kW)]

D = no clearance to permanently closed window when installed with approved glass penetration termination

E = clearance to permanently closed window [16 inches 41 cm recommended to prevent condensation on window]

F = vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2 feet (61 cm) from the centreline of the termination [22 inches (56 cm) minimum]

G = clearance to unventilated soffit
[16inches (41 cm) minimum to non-combustibles]
[22 inches (56 cm) minimum to combustibles]

H = clearance to outside corner [9 inches (23 cm) minimum]

I = clearance to inside corner [12 inches (31 cm) minimum]

J = * not to be installed above a meter/regulator assembly within 40" (103 cm) horizontally from the centreline of the regulator

K = clearance to service regulator vent outlet [3 feet minimum in the United States] [*6 feet (1.8 m) minimum in Canada]

L = clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance [16 inches (41 cm) minimum for appliances ≤100 000 BTU/H (30kW)]

† a vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings

‡ only permitted if veranda, porch, deck, or balcony has an open side that is equal to or greater than the depth of the enclosed area

* as specified in CGA B149 Installation Codes. Note: local Codes or Regulations may require different clearances

M = clearance to mechanical air supply inlet
[*6 feet (1.8 m) minimum]

N = † clearance above paved sidewalk or a paved driveway located on public property [*7 feet (2.1 m) minimum]

P = clearance under veranda, porch, deck, or balcony
[16 inches (41 cm) minimum‡ to non-combustibles]
[22 inches (56 cm) minimum‡ to combustibles]

Q = clearance above a roof [24 inches (61 cm) minimum]

R = clearance to adjacent walls and neighbouring buildings
[18 inches (46 cm) minimum]

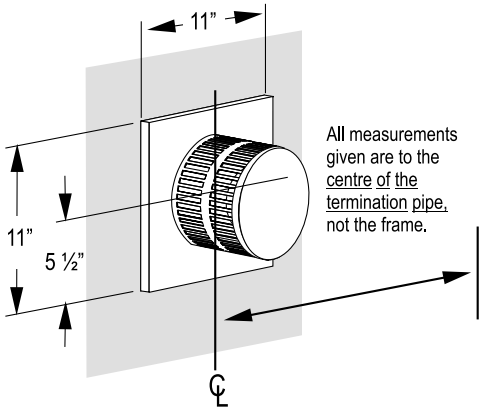
S = clearance from corner in recessed location
[12 inches (31 cm) minimum]

T = maximum depth in recessed location
[48 inches (122 cm) minimum]

U = minimum width for back wall of recessed location
[24 inches (61 cm) minimum]

V = no horizontal clearance between the frames of two terminations that are level.

W = horizontal clearance between the frames of two terminations that are not level. [36 inches (92 cm) minimum]



Appendix B - M40DV-PFC-MH Mobile Home

This appliance may be installed as an OEM installation in a manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280*, in the United States or The Mobile Home Standard*, CAN / CSA Z240 MH Series,* in Canada. This appliance is only for use with the type(s) of gas indicated on the rating plate. A conversion kit is supplied with the appliance.

M40DV-PFC-MH Mobile Home

The mobile home option is a factory installed on the M40DV-PFC-MH gas fireplace, and is for use in a manufactured or mobile home. ***The standard M40DV-PFC or the M40DV-PFC-I equipped with Hot Surface Ignition (HSI) are not approved for use in mobile or manufactured homes.***

The M40DV-PFC-MH is rated for:

- Natural Gas at 30,000 BTU/H (8.79 Kilowatts) max. input, and 24,000 BTU/H (7.03 Kilowatts) min. input.
- Propane at 30,000 BTU/H (8.79 Kilowatts) max. input, and 24,000 BTU/H (7.03 Kilowatts) min. input.

A manufactured home (USA only) or mobile home OEM installation must conform with the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280*, or when such a standard is not applicable, the Standard for *Fire Safety Criteria for Manufactured Home Installation Sites and Communities, ANSI/NFPA 501A,* in the United States or the *Mobile Home Standard, CAN / CSA Z240 MH Series,* in Canada.

Gas Control Valve

The following gas control valve is installed on the M40DV-PFC-MH.

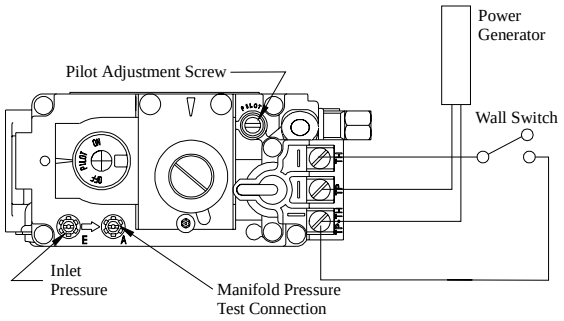


Figure B1. ***Sit Nova 820*** *gas valve.*

Conversion Kits

The M40DV-PFC-MH mobile home appliance is field convertible between Natural Gas (NG) and Propane (LP).

To convert from Natural Gas to Propane order conversion kit # RCV725.

To convert from Propane to Natural Gas order conversion kit # RCV825.

Conversion kits are available for standard M40DV-PFC conversion between Natural Gas (NG) and Propane (LP).

XG0205 Rev.03 - 10/2001

Canadian Heating Products Inc.
Langley, BC V4W 4A1

Montigo Del Ray Corp.
Ferndale, WA 98248